

GenCore version 5.1.6
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OM protein - protein search, using sw model

Run on: March 17, 2004, 18:47:23 ; Search time 25.0763 Seconds

(without alignment)
6683.183 Million cell updates/sec

Title: US-09-989-981a-6

Perfect score: 3326

Sequence: 1 MGDLSTLPGSGMGQVNRG.....PALVILGIVKIRDLISR 651

Scoring table:

BLOSUM62

Gapop 10.0 , Gapext 0.5

Searched: 1045404 seqs, 257433775 residues

Total number of hits satisfying chosen parameters: 1045404

Minimum DB seq length: 0

Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%

Maximum Match 100%

Listing first 45 summaries

Database: Published Applications-AA:
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18: /cgn2_6/ptodata/1/pubppa/US60_PUBCOMB.pep:*

Pred. No. is the number of results predicted by chance to have a
score greater than or equal to the score of the result being printed,
and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	ID	Description
1	3326	100.0	651	9	US-09-837-992-3
2	3326	100.0	651	10	US-09-989-981a-6
3	3326	100.0	651	14	US-10-090-455-6
4	2744.5	82.5	652	9	US-09-837-992-1
5	2744.5	82.5	652	10	US-09-989-981a-2
6	1308	39.3	256	15	US-10-104-047-2795
7	697	21.0	672	10	US-09-989-981a-4
8	697	21.0	673	10	US-09-989-981a-8
9	697	21.0	673	14	US-10-090-455-7
10	682.5	20.5	655	10	US-09-961-086-1
11	682.5	20.5	655	15	US-10-405-806-13
12	680.5	20.5	655	9	US-09-981-353-35
13	680.5	20.5	655	14	US-10-120-687-61
14	680.5	20.5	655	15	US-10-405-806-2
15	674.5	20.3	655	9	US-09-866-866a-10

16	674.5	20.3	655	14	US-10-090-455-5	Sequence 5, Appl1
17	672.5	20.2	655	9	US-09-866-866a-27	Sequence 27, Appl1
18	660	19.8	657	9	US-09-866-866a-14	Sequence 14, Appl1
19	627	18.9	1095	15	US-10-369-493-2025	Sequence 2025, Ap
20	621	18.7	1049	15	US-10-369-493-1520	Sequence 1520, Ap
21	613	18.4	819	12	US-10-425-114-54421	Sequence 54421, A
22	610	18.3	725	12	US-10-424-599-175941	Sequence 175941,
23	609.5	18.3	695	12	US-10-424-599-176182	Sequence 176182,
24	602.5	18.1	663	13	US-10-108-605-245	Sequence 245, App
25	598.5	18.0	674	14	US-10-090-455-4	Sequence 4, Appl1
26	598.5	18.0	674	16	US-10-429-160-10	Sequence 10, Appl
27	595.5	17.9	658	15	US-10-369-493-5347	Sequence 5347, Ap
28	590.5	17.8	638	13	US-10-072-621-10	Sequence 10, Appl
29	585.5	17.6	646	13	US-10-072-621-9	Sequence 9, Appl1
30	585.5	17.6	646	14	US-10-090-455-2	Sequence 8, Appl1
31	578.5	17.4	627	14	US-10-090-455-8	Sequence 157, App
32	578	17.4	604	9	US-09-745-763-197	Sequence 242078,
33	574.5	17.3	1084	12	US-10-424-599-242078	Sequence 63125, A
34	574.5	17.3	1101	12	US-10-425-114-63125	Sequence 2, Appl1
35	571.5	17.2	646	14	US-10-079-087-2	Sequence 4, Appl1
36	570.5	17.2	646	13	US-10-154-452-4	Sequence 15459,
37	569	17.1	623	12	US-10-424-599-154459	Sequence 13, Appl
38	567.5	17.1	623	14	US-10-090-455-13	Sequence 14, Appl
39	565.5	17.0	599	15	US-10-210-130-14	Sequence 8, Appl1
40	562.5	16.9	646	13	US-10-154-452-8	Sequence 5740, Ap
41	554	16.7	559	15	US-10-369-493-5740	Sequence 5748, Ap
42	545.5	16.4	608	15	US-10-369-493-5748	Sequence 238651,
43	541.5	16.3	706	12	US-10-424-599-238651	Sequence 53846, A
44	540.5	16.3	656	12	US-10-425-114-53846	Sequence 64380, A
45	540.5	16.3	673	12	US-10-425-114-64380	

ALIGNMENTS

RESULT 1
US-09-837-992-3
; Sequence 3, Application US/09837992
; Patent No. US20020081687A1
; GENERAL INFORMATION:
; APPLICANT: Tian, Hui
; APPLICANT: Schultz, Joshua
; APPLICANT: Shan, Bei
; TITLE OF INVENTION: Sticetereolemia Susceptibility Gene (SSG) : Compositions
; FILE REFERENCE: 018781-006020US
; CURRENT APPLICATION NUMBER: US/09/837,992
; CURRENT FILING DATE: 2001-04-18
; PRIOR APPLICATION NUMBER: US 60/198,465
; PRIOR FILING DATE: 2000-04-18
; PRIOR APPLICATION NUMBER: US 60/204,234
; PRIOR FILING DATE: 2000-05-15
; NUMBER OF SEQ ID NOS: 45
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO: 3
; LENGTH: 651
; TYPE: PRT
; ORGANISM: Homo sapiens
; FEATURE:
; OTHER INFORMATION: human sticetereolemia susceptibility gene (SSG)
; OTHER INFORMATION: amino acid sequence
US-09-837-992-3

Query Match 100.0%; Score 3326; DB 9; Length 651;
Best Local Similarity 100.0%; Pred. No. 1.5e-309; Indels 0; Gaps 0;
Matches 651; Conservative 0;
Cy 1 MGDLSTLPGSGMGQVNRGSSLEGAPATAPPHSHIGILHAISYVSHRVRPMDITSC 60
Db 1 MGDLSTLPGSGMGQVNRGSSLEGAPATAPPHSHIGILHAISYVSHRVRPMDITSC 60
Cy 61 RQMTROLKLVSLVSGQIMCTIGSSGSKTLLDAMSGRLRAGIFLGVYVNGRAL 120

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Db 61 RQWTRQILKDVSLVYESGQIMCIGSSGSKTLLDAMSGRLGRAGTFLGEVYVNGRAL 120
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Db 121 RREOFQDCFSYVLOSDDLSSLTVEETLHYTALLAIRGNPGSPQKVEAVMAELSLSHV 180
Qy 181 ADRLIGNVSLGGISTGERRRVSIQAOLLODPKVMLEPDEPTGLDQMTANOIVLLVELAR 240
Db 181 ADRLIGNVSLGGISTGERRRVSIQAOLLODPKVMLEPDEPTGLDQMTANOIVLLVELAR 240
Qy 241 RNRIVVLTTHQPRSELFPQDKIALISFGEILFCGTPAEMLEDFPNDGYPCEHSPNPDF 300
Db 241 RNRIVVLTTHQPRSELFPQDKIALISFGEILFCGTPAEMLEDFPNDGYPCEHSPNPDF 300
Qy 301 YMDLTSVDTQSKEREIETSKRVOMIESAYKKSACIKTKLNIEMKHLKTLPMVPEFKTD 360
Db 301 YMDLTSVDTQSKEREIETSKRVOMIESAYKKSACIKTKLNIEMKHLKTLPMVPEFKTD 360
Qy 361 SPGVFSKLGVLRRVTRNLVRNKLAIVITRLLQNLIMGFLFVLVRVSNVAKGALQDRV 420
Db 361 SPGVFSKLGVLRRVTRNLVRNKLAIVITRLLQNLIMGFLFVLVRVSNVAKGALQDRV 420
Qy 421 GLLYQVGAATPYTGMLNANLFPVLRAYSDDOSQGLYQKQOMLAVLHVPESVATM 480
Db 421 GLLYQVGAATPYTGMLNANLFPVLRAYSDDOSQGLYQKQOMLAVLHVPESVATM 480
Qy 481 IFSSVCYWTGLHPEVARFGYFSALLAPHLIGSEFLTVLGIQONPNIVNSVALLSIA 540
Db 481 IFSSVCYWTGLHPEVARFGYFSALLAPHLIGSEFLTVLGIQONPNIVNSVALLSIA 540
Qy 541 GVLVSGGLRNIQEMPIPKIISYTFQKYCEIIVNVEFYGLANTCGSSSNVSTTNPMC 600
Db 541 GVLVSGGLRNIQEMPIPKIISYTFQKYCEIIVNVEFYGLANTCGSSSNVSTTNPMC 600
Qy 601 AFTQGIQFIKTCPGATSRFTMNFLLIYSFIPALVILGIVFKIRDLHISR 651
Db 601 AFTQGIQFIKTCPGATSRFTMNFLLIYSFIPALVILGIVFKIRDLHISR 651

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RESULT 2
US-09-989-981A-6
; Sequence 6, Application US/09989981A
; Publication No. US20030049730A1
; GENERAL INFORMATION:
; APPLICANT: Hobbs, Helen H.
; APPLICANT: Shan, Bei
; APPLICANT: Barnes, Robert
; APPLICANT: Tian, Hui
; APPLICANT: Tularik Inc.
; APPLICANT: Board of Regents, The University of Texas System
; TITLE OF INVENTION: ABCG5 and ABCG8: Compositions and Methods of Use
; FILE REFERENCE: 018781-007320US
; CURRENT APPLICATION NUMBER: US/09/989,981A
; CURRENT FILING DATE: 2002-07-23
; PRIOR APPLICATION NUMBER: US 60/252,235
; PRIOR FILING DATE: 2000-11-20
; PRIOR APPLICATION NUMBER: US 60/253,645
; PRIOR FILING DATE: 2000-11-28
; NUMBER OF SEQ ID NOS: 13
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 6
; LENGTH: 651
; TYPE: PRT
; ORGANISM: Homo sapiens
; FEATURE:
; OTHER INFORMATION: human ABCG5 (hABCG5)
US-09-989-981A-6

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Query Match 100.0%; Score 3326; DB 10; Length 651;
Best Local Similarity 100.0%; Pred. No. 1.5e-309;
Matches 651; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

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Qy 1 MGDLSITPGSGMGLQVNRGSSQSSLEGAPATAPEPHSGITLHASYSVSHRVRPMDITSC 60
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Db 61 RQWTRQILKDVSLVYESGQIMCIGSSGSKTLLDAMSGRLGRAGTFLGEVYVNGRAL 120
Qy 121 RREOFQDCFSYVLOSDDLSSLTVEETLHYTALLAIRGNPGSPQKVEAVMAELSLSHV 180
Db 121 RREOFQDCFSYVLOSDDLSSLTVEETLHYTALLAIRGNPGSPQKVEAVMAELSLSHV 180
Qy 181 ADRLIGNVSLGGISTGERRRVSIQAOLLODPKVMLEPDEPTGLDQMTANOIVLLVELAR 240
Db 181 ADRLIGNVSLGGISTGERRRVSIQAOLLODPKVMLEPDEPTGLDQMTANOIVLLVELAR 240
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Db 241 RNRIVVLTTHQPRSELFPQDKIALISFGEILFCGTPAEMLEDFPNDGYPCEHSPNPDF 300
Qy 301 YMDLTSVDTQSKEREIETSKRVOMIESAYKKSACIKTKLNIEMKHLKTLPMVPEFKTD 360
Db 301 YMDLTSVDTQSKEREIETSKRVOMIESAYKKSACIKTKLNIEMKHLKTLPMVPEFKTD 360
Qy 361 SPGVFSKLGVLRRVTRNLVRNKLAIVITRLLQNLIMGFLFVLVRVSNVAKGALQDRV 420
Db 361 SPGVFSKLGVLRRVTRNLVRNKLAIVITRLLQNLIMGFLFVLVRVSNVAKGALQDRV 420
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Db 421 GLLYQVGAATPYTGMLNANLFPVLRAYSDDOSQGLYQKQOMLAVLHVPESVATM 480
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Db 481 IFSSVCYWTGLHPEVARFGYFSALLAPHLIGSEFLTVLGIQONPNIVNSVALLSIA 540
Qy 541 GVLVSGGLRNIQEMPIPKIISYTFQKYCEIIVNVEFYGLANTCGSSSNVSTTNPMC 600
Db 541 GVLVSGGLRNIQEMPIPKIISYTFQKYCEIIVNVEFYGLANTCGSSSNVSTTNPMC 600
Qy 601 AFTQGIQFIKTCPGATSRFTMNFLLIYSFIPALVILGIVFKIRDLHISR 651
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RESULT 3
US-10-090-455-6
; Sequence 6, Application US/10090455
; Publication No. US20030027259A1
; GENERAL INFORMATION:
; APPLICANT: Chen, Hongyun
; APPLICANT: Le Bihan, Stephane
; TITLE OF INVENTION: NOVEL ABCG4 TRANSPORTER AND USES THEREOF
; FILE REFERENCE: 100103, 406
; CURRENT APPLICATION NUMBER: US/10/090,455
; CURRENT FILING DATE: 2002-03-01
; NUMBER OF SEQ ID NOS: 17
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 6
; LENGTH: 651
; TYPE: PRT
; ORGANISM: Homo sapiens
US-10-090-455-6

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Query Match 100.0%; Score 3326; DB 14; Length 651;
Best Local Similarity 100.0%; Pred. No. 1.5e-309;
Matches 651; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

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Db      181 APRLIGNYSLGISIGERRRVSIAAQLLODPKVMFLDEPTTGLDCMTANQIVLLVLELAR 240
Qy      241 RRRIVVLTTHQPRSELFOHFDKIALISFGBELLFCGTPAEMLDPFNDGCPCEHSNPF 300
Db      241 RRRIVVLTTHQPRSELFOHFDKIALISFGBELLFCGTPAEMLDPFNDGCPCEHSNPF 300
Qy      301 YMDLTSVDTQSKEREIETSKRVQMTESAYKSAICHKTLKNTIERMKHLKTLPMVPEKTKD 360
Db      301 YMDLTSVDTQSKEREIETSKRVQMTESAYKSAICHKTLKNTIERMKHLKTLPMVPEKTKD 360
Qy      361 SPGVFSGKLVLLRRVTRNLRVNRKLAVITRLQNLIMGLFLFVLRVRSNVLKGAIQDRV 420
Db      361 SPGVFSGKLVLLRRVTRNLRVNRKLAVITRLQNLIMGLFLFVLRVRSNVLKGAIQDRV 420
Qy      421 GLLYQFVGATPYTGMLANAVLFPVLRAVSDQSDGLYQKQOMMLAYALHVLPSFVATM 480
Db      421 GLLYQFVGATPYTGMLANAVLFPVLRAVSDQSDGLYQKQOMMLAYALHVLPSFVATM 480
Qy      481 TRSVVCYMTLGLHPEVARGYFSAALLAPHLIGEFLLVLLGIVQPNIVNSVVALLSIA 540
Db      481 TRSVVCYMTLGLHPEVARGYFSAALLAPHLIGEFLLVLLGIVQPNIVNSVVALLSIA 540
Qy      541 GVLVSGGFRLNIQEMPIPKIISYFTFOKYCSEILVWNEFYGLNFCGSSNVSVTNNPVC 600
Db      541 GVLVSGGFRLNIQEMPIPKIISYFTFOKYCSEILVWNEFYGLNFCGSSNVSVTNNPVC 600
Qy      601 APTQGIQFIKTCPGATSRFTMNFLLYSGFIPALVILGIVFKIRDHLISR 651
Db      601 APTQGIQFIKTCPGATSRFTMNFLLYSGFIPALVILGIVFKIRDHLISR 651

RESULT 4
US-09-837-992-1
; Sequence 1, Application US/09837992
; Patent No. US20020081687A1
; GENERAL INFORMATION:
; APPLICANT: Tian, Hui
; APPLICANT: Schultze, Joshua
; APPLICANT: Shan, Bei
; APPLICANT: Tularik Inc.
; TITLE OF INVENTION: Sitsosterolemia Susceptibility Gene (SSG): Compositions
; FILE REFERENCE: 018781-006020US
; CURRENT APPLICATION NUMBER: US/09/837,992
; PRIOR FILING DATE: 2001-04-18
; PRIOR APPLICATION NUMBER: US 60/198,465
; PRIOR FILING DATE: 2000-04-18
; PRIOR APPLICATION NUMBER: US 60/204,234
; NUMBER OF SEQ ID NOS: 45
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 1
; LENGTH: 652
; TYPE: PRT
; ORGANISM: Mus musculus
; FEATURE:
; OTHER INFORMATION: mouse sitsosterolemia susceptibility gene (SSG)
; OTHER INFORMATION: amino acid sequence
US-09-837-992-1

Query Match      82.5%; Score 2744.5; DB 9; Length 652;
Best Local Similarity 80.2%; Pred. NO. 8.8e-254;
Matches 523; Conservative 64; Mismatches 64; Indels 1; Gaps 1;

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Qy      1 MGDLSTLTPGSGMGLQVNRGSSSLGAPATAPEP-HSILGILHASYSVSHRVPWMDITS 59
Db      1 MGELPLSPGAGPPIHNRGSLSSLEQSVTGEARHSLAVLHVSISVSRVPPMNIKS 60
Qy      60 CROQMTROIILKDVSLVYESQIMCIISSGSGKTTLLDAMSGRLGKGFLLGEVYNGRA 119
Db      61 CQKMDRQIILKDVSLVYESQIMCIISSGSGKTTLLDAMSGRLGKGFLLGEVYNGCE 120
Qy      120 LRREQFDCCSYVLQSDPTLLSLTVRETTLYTALLAIRGNPGSPQKYEAVVAEISLSHV 179
Db      121 LRREQFDCCSYVLQSDPTLLSLTVRETTLYTALLAIRGNPGSPQKYEAVVAEISLSHV 180
Qy      180 VADRIGNYSLGISIGERRRVSIAAQLLODPKVMFLDEPTTGLDCMTANQIVLLVLELA 239
Db      181 VADMIGSYNFGISSERRRVSIAAQLLODPKVMFLDEPTTGLDCMTANQIVLLVLELA 240
Qy      240 RRRIVVLTTHQPRSELFOHFDKIALISFGBELLFCGTPAEMLDPFNDGCPCEHSNPF 299
Db      241 RRRIVVLTTHQPRSELFOHFDKIALISFGBELLFCGTPAEMLDPFNDGCPCEHSNPF 300
Qy      300 YMDLTSVDTQSKEREIETSKRVQMTESAYKSAICHKTLKNTIERMKHLKTLPMVPEKTK 359
Db      301 YMDLTSVDTQSKEREIETSKRVQMTESAYKSAICHKTLKNTIERMKHLKTLPMVPEKTK 360
Qy      360 DSPGVFSGKLVLLRRVTRNLRVNRKLAVITRLQNLIMGLFLFVLRVRSNVLKGAIQDR 419
Db      361 DPGMFGKLVLLRRVTRNLRVNRKLAVITRLQNLIMGLFLFVLRVRSNVLKGAIQDR 420
Qy      420 VGLLYQFVGATPYTGMLANAVLFPVLRAVSDQSDGLYQKQOMMLAYALHVLPSFVAT 479
Db      421 VGLLYQFVGATPYTGMLANAVLFPVLRAVSDQSDGLYQKQOMMLAYALHVLPSFVAT 480
Qy      480 MIFSSVCYMTLGLHPEVARGYFSAALLAPHLIGEFLLVLLGIVQPNIVNSVVALLSI 539
Db      481 VIFSSVCYMTLGLHPEVARGYFSAALLAPHLIGEFLLVLLGIVQPNIVNSVVALLSI 540
Qy      540 AGVLVSGGFRLNIQEMPIPKIISYFTFOKYCSEILVWNEFYGLNFCGSSNVSVTNNPVC 599
Db      541 SGLLIGSGFRLNIQEMPIPKIISYFTFOKYCSEILVWNEFYGLNFCGSSNVSMTLHNM 600
Qy      600 CAPTQGIQFIKTCPGATSRFTMNFLLYSGFIPALVILGIVFKIRDHLISR 651
Db      601 CAPTQGIQFIKTCPGATSRFTMNFLLYSGFIPALVILGIVFKIRDHLISR 652

RESULT 5
US-09-989-981A-2
; Sequence 2, Application US/09989981A
; Publication No. US20030049730A1
; GENERAL INFORMATION:
; APPLICANT: Hobbs, Helen H.
; APPLICANT: Shan, Bei
; APPLICANT: Barnes, Robert
; APPLICANT: Tian, Hui
; APPLICANT: Tularik Inc.
; TITLE OF INVENTION: ABCG5 and ABCG8: Compositions and Methods of Use
; FILE REFERENCE: 018781-007320US
; CURRENT APPLICATION NUMBER: US/09/989,981A
; PRIOR FILING DATE: 2002-07-23
; PRIOR APPLICATION NUMBER: US 60/252,235
; PRIOR FILING DATE: 2000-11-20
; PRIOR APPLICATION NUMBER: US 60/253,645
; NUMBER OF SEQ ID NOS: 13
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 2
; LENGTH: 652
; TYPE: PRT
; ORGANISM: Mus musculus
; FEATURE:
; OTHER INFORMATION: mouse ABCG5 (mABCG5)
US-09-989-981A-2

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Query Match 82.5%; Score 2744.5; DB 10; Length 652;
 Best Local Similarity 80.2%; Pred. No. 8.8e-254;
 Matches 523; Conservative 64; Mismatches 64; Indels 1; Gaps 1;

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QY 1 MGDLSSLTTPGSGMGLQVNRGSSGLEGAAPATAPEP-HSLGILHASYSVSHRVRWMDITS 59
DB 1 MGELFFLSPEGARGFHNRGSLSSLEQSVGTETARHSLGVLHVSYSVSNRNVGPMNIXKS 60
QY 60 CROQWTRQILNDVSLVYESGOIMCIGSSGSKTTLDPAMSGRLGRAGTFLGEAYVNGRA 119
DB 61 CQOKMDROLKDVSLYISGQIMCIGSSGSKTTLDPALISGRTRTGLEGFVNGCE 120
QY 120 LRREGQDQCFSVYLOSDTLLSSLTIVRETLHYTALAIIRGNPGSFQKKVEAVMAELSLH 179
DB 121 LRDPQDQCFSVYLOSDVFLSSLTIVRETLHYTAMALCRSSADPYNKVEAVMAELSLH 180
QY 180 VADRILGNVSLGCTGERRRVSIAOILDPKXWLPEPTTGHDCMTANOIVTLVLELA 239
DB 181 VADQWIGSINRGSSIGERRRVSIAOILDPKXWMLDEPTTGLDGMTANOIVTLVLELA 240
QY 240 RNRRLVLTIHQPRSELFQLEPKIALISFGELLFCGTPAEXMLDFPNDGYPCEPHSNPD 299
DB 241 RDRRLVLTIHQPRSELFQLEPKIALITYGELVFCGTPBEMNGYPCPHSNPD 300
QY 300 FPMDLTSDVDSKERETSKRVQVMEISAYKKSATCHTKLNIEEMKHLKTLPMVPPFKTK 359
DB 301 FPMDLTSDVDSKERETSKRVQVMEISAYKKSATCHTKLNIEEMKHLKTLPMVPPFKTK 360
QY 360 DSPGVSKLGVLLRRVTRNLVANKLAVITRLQNLIMGLFLLFVLRVRSVNLKGAIQDR 419
DB 361 DPGMFGKLVLRVTRNLVANKLAVITRLQNLIMGLFLLFVLRVRSVNLKGAIQDR 420
QY 420 VGLLQVFGATPYTGMLNANVLPVLRVAVDSQSDGQYQKQWMLAALVLPSPVAT 479
DB 421 VGLLQVFGATPYTGMLNANVLPVLRVAVDSQSDGQYQKQWMLAALVLPSPVAT 480
QY 480 MIFSSVCWTLGLHPEVARFGYFSAAALAPHLIGFLLVLLGIQVQNNIVNSVVALISI 539
DB 481 VIFSSVCWTLGLHPEVARFGYFSAAALAPHLIGFLLVLLGIQVQNNIVNSVVALISI 540
QY 540 AGVLVSGGLRNIOEMPIPFKLTISYFTPOKICSELLVNERFGNFTGSSNVSTYTPM 599
DB 541 SGLLIGSGFIRNIOEMPIPFKLTIGYFTPOKICSELLVNERFGNFTGSSNVSTYTPM 600
QY 600 CAFTGCIQPIEKTGCGATSRFTMNFILLYSFIPLAVIIGIVVFKIRDLISR 651
DB 601 CAITGQVQPIEKTGCGATSRFTMNFILLYGFIPLAVIIGIVVFKIRDLISR 652

```

RESULT 6
 US-10-104-047-2795
 ; Sequence 2795, Application US/10104047
 ; Publication No. US20030236392A1
 ; GENERAL INFORMATION:
 ; APPLICANT: HELIX RESEARCH INSTITUTE
 ; TITLE OF INVENTION: NO. US20030236392A1 full length cDNA
 ; FILE REFERENCE: H1-A0105
 ; CURRENT APPLICATION NUMBER: US/10/104,047
 ; PRIOR FILING DATE: 2002-03-25
 ; PRIOR APPLICATION NUMBER:
 ; NUMBER OF SEQ ID NOS: 4096
 ; SOFTWARE: PatentIn Ver. 2.1
 ; SEQ ID NO 2795
 ; LENGTH: 256
 ; TYPE: PRT
 ; ORGANISM: Homo sapiens
 US-10-104-047-2795

Query Match 39.3%; Score 1308; DB 15; Length 256;
 Best Local Similarity 100.0%; Pred. No. 1.2e-116;
 Matches 256; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

```

QY 396 MGELFFLVLRVRSNVLKGAIQDRVGLDYQFVGATPYTGMLNANVLPVLRVAVDSQESQD 455
DB 1 MGELFFLVLRVRSNVLKGAIQDRVGLDYQFVGATPYTGMLNANVLPVLRVAVDSQESQD 60
QY 456 GLYQKQWMLAALVLPSPVATMTFSSVCWTLGLHPEVARFGYFSAAALAPHLIGEF 515
DB 61 GLYQKQWMLAALVLPSPVATMTFSSVCWTLGLHPEVARFGYFSAAALAPHLIGEF 120
QY 516 LTVLVLGIQVQNNIVNSVVALISIAVLYGSGFLRNIOEMPIPFKLTISYFTPOKICSEIL 575
DB 121 LTVLVLGIQVQNNIVNSVVALISIAVLYGSGFLRNIOEMPIPFKLTISYFTPOKICSEIL 180
QY 576 VNEFYGLNFTGSSNVSTYTPMCAFTGIGIPIEKTGCGATSRFTMNFILLYSFIPLAV 635
DB 181 VNEFYGLNFTGSSNVSTYTPMCAFTGIGIPIEKTGCGATSRFTMNFILLYSFIPLAV 240
QY 636 ILGIVVFKIRDLISR 651
DB 241 ILGIVVFKIRDLISR 256

```

RESULT 7
 US-09-989-981A-4
 ; Sequence 4, Application US/0998981A
 ; Publication No. US20030049730A1
 ; GENERAL INFORMATION:
 ; APPLICANT: Hobbs, Helen H.
 ; APPLICANT: Snaa, Bel
 ; APPLICANT: Barnes, Robert
 ; APPLICANT: Tian, Hui
 ; APPLICANT: Tularik Inc.
 ; APPLICANT: Board of Regents, The University of Texas System
 ; TITLE OF INVENTION: ABCG5 and ABCG8: Compositions and Methods of Use
 ; FILE REFERENCE: 018781-007320US
 ; CURRENT APPLICATION NUMBER: US/09/989,981A
 ; CURRENT FILING DATE: 2002-07-23
 ; PRIOR APPLICATION NUMBER: US 60/252,235
 ; PRIOR FILING DATE: 2000-11-20
 ; PRIOR APPLICATION NUMBER: US 60/253,645
 ; PRIOR FILING DATE: 2000-11-28
 ; NUMBER OF SEQ ID NOS: 13
 ; SOFTWARE: PatentIn Ver. 2.1
 ; SEQ ID NO 4
 ; LENGTH: 672
 ; TYPE: PRT
 ; ORGANISM: Mus musculus
 ; OTHER INFORMATION: mouse ABCG8 (mABCG8)
 US-09-989-981A-4

Query Match 21.0%; Score 697; DB 10; Length 672;
 Best Local Similarity 29.1%; Pred. No. 2.2e-57;
 Matches 195; Conservative 129; Mismatches 263; Indels 84; Gaps 18;

```

QY 15 LQVNRGSSGLEGAAPATAPEP-HSLGILHASYSVSHRVR-----PWRD-ITSCG 61
DB 17 LQVNRGSSGLEGAAPATAPEP-HSLGILHASYSVSHRVR-----PWRD-ITSCG 72
QY 62 QOWTRQI-----LKDVSLVYESGOIMCIGSSGSKTTLDPAMSGRLGRAGTFLGEAY 112
DB 73 IPWNRGSSGLEGAAPATAPEP-HSLGILHASYSVSHRVR-----PWRD-ITSCG 131
QY 113 VYVNGRALRREGQDQCFSVYLOSDTLLSSLTIVRETLHYTALAI-RRGNPGSFQKKVEAV 171
DB 132 IWINQPSSTPQLVRKCAHVRQHDQLPNTLVRETLAFLNOMKLPFTFSQADKXVEDV 191
QY 172 MAELSLHVAADRILGNVSLGISTGERRRVSIAOILDPKXWLPEPTTGHDCMTANOI 231
DB 192 IAEFLRQCANTRVGNVYVSGERRRVSIGVQLMNGIILDEPTSGLSFTAHNI 251
QY 232 VALLVLRARNRRLVLTIHQPRSELFQLEPKIALISFGELLFCGTPAEXMLDFPNDGYP 291

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Db 252 VTTLSLHANGNRLVLSLHQPSSDIFRLFDVLVLTSGTPIYLGAQOQVYFISIGHPC 311
 QY 292 PEHNPDPYMDLTSVDTSKEREIETSKRVOMIESAYKKA-----ICHTLKNIBRM 345
 Db 312 PRSNADYVDLTSIDRSKEREVATVEKAOSLALFLEKVGDDFLMKAEALNMTS 371
 QY 346 KHLKLPMPFPTKDS-----PGVFSKLGVLLRRVTRNLVRNKLAVITLLONLIMG 397
 Db 372 THVSLTL-----TQDDCGTAVELPQMIEQFSLIRQISNDRPLPTLLIHSGEACLS 427
 QY 398 LFLFPLVLRVSNVLSKAIODRVGLLYQFVGATPYGMNAVNLFPVLAVDSQDGL 457
 Db 428 LIIGFLYHGGAQOL--SFMDTALLFPMGALIPRVILDVVSKCHSESMLYLEBGL 485
 QY 458 YQKQOMLAVLHVLPPSVATMIFSSVCYWTGLHPEVARFGYSALILAPHLIGEL- 516
 Db 486 YTAGPYFFAKILGELPEHCAYVLIYAMPYIWLNLRPVELF-----LL--HPLVWL 537
 QY 517 -----TLVLLGIQVQNPNI--VNSVVALLSIAGVLVSGFPLRNIQEMPIPKIISYFTPOKY 570
 Db 538 VECRRMALAASMLPTFMMSFFCALYNSPFLITAGFYNLNDMLIVAMISKSLFRW 597
 QY 571 CSEILVNEBYGINT--CGSSNVSVTTPMCAFTQGIQIEKTCGATSREPMFLILY 628
 Db 598 CFGLMJOIGNHLVYTTQIGNFTFSILGDTM-----ISAMDLNSHPLY 640
 QY 629 SFIPALVIIGI 639
 Db 641 AYY-LIVIGI 649

RESULT 8

US-09-989-981A-8
 ; Sequence 8, Application US/09989981A
 ; Publication No. US20030049730A1
 ; GENERAL INFORMATION:
 ; APPLICANT: Hobbs, Helen H.
 ; APPLICANT: Shan, Bel
 ; APPLICANT: Barnes, Robert
 ; APPLICANT: Tian, Hui
 ; APPLICANT: Talarik Inc.
 ; APPLICANT: Board of Regents, The University of Texas System
 ; TITLE OF INVENTION: ABC8 and ABC88: Compositions and Methods of Use
 ; FILE REFERENCE: 018781-007320US
 ; CURRENT APPLICATION NUMBER: US/09/989,981A
 ; PRIOR FILING DATE: 2002-07-23
 ; PRIOR APPLICATION NUMBER: US 60/252,235
 ; PRIOR FILING DATE: 2000-11-20
 ; PRIOR APPLICATION NUMBER: US 60/253,645
 ; PRIOR FILING DATE: 2000-11-28
 ; NUMBER OF SEQ ID NOS: 13
 ; SOFTWARE: PatentIn Ver. 2.1
 ; SEQ ID NO 8
 ; LENGTH: 673
 ; TYPE: PRT
 ; ORGANISM: Homo sapiens
 ; FEATURE:
 ; OTHER INFORMATION: human ABC8 (hABC8)
 US-09-989-981A-8

Query Match 21.0%; Score 697; DB 10; Length 673;
 Best Local Similarity 28.9%; Pred. No. 2.2e-57;
 Matches 187; Conservative 124; Mismatches 241; Indels 96; Gaps 16;
 QY 8 TPGGSMGLQVNRGSSSLEGA PAT-APPHSLGILHASYSVSHRVR-PWMD-ITSCROQW 64
 Db 16 TPQDTGLODRLPFSSESDNSLYFTYSGQPNLTLEVRDLYQVDLASQVPMFEQLAQFPMW 75
 QY 65 TRQI-----LKDVLVYESGOIMCIISSSGSGKTTLLDAMSGRLGAGTF-LGEVYV 115
 Db 76 TSPCQNSCEIGIONLSFKVRSGQMLAIISGSGGASLIDVITGR-GHGKIKSGQIWI 134
 QY 116 NGRALREPOFQDCFSYVLOSPTLLSLTVRETLHYTALLAI-RGNPGSFQKVEAVMAE 174

Db 135 NGQPSSEQLVRKCVAAHRQNNOLLPNLTRETLAFIAQKMLPPTFQOARDKVEEVIAR 194
 QY 175 LLSHVADRLIGVYSLGISTGERRRYSIAQOLLDPKVMLEPPTGLDCMTANQIVVL 234
 Db 195 LRRLQCADTRVGNVYVGLSGERRRYSIGVQLNMPGILILDEPISGDSFRAHNLVKT 254
 QY 235 LVELARRNRIYVLTTHQPSSELPQLPDKAIIISFGBELIFCGTAEMLDPPNDGYPCEH 294
 Db 255 LSRILAKNRLVYLSLHQPSSDIFRLFDVLVLTSGTPIYLGAQOQVYFISIGHPC 314
 QY 295 SNPDPYMDLTSVDTSKEREIETSKRVOMIESAYKKAICHTLKNIEEMKL----- 348
 Db 315 SNPDPYMDLTSVDTSKEREIETSKRVOMIESAYKKAICHTLKNIEEMKL----- 362
 QY 349 -----KTLPM-----VPFXTKDSPGVFSKLGVLLRRVTRNLVRNKLAVITRL 390
 Db 363 AETKQLEDPCVSSVPLDNTCLPSPTK-MPGAVQOFTLLIRQISNDRDLPTLLIHG 421
 QY 391 LQNLIMGLELFPVLRVRSVVLKGAIQ-----DRVGLLYQFVGATPYGMNAVNLFPVL 446
 Db 422 AEACLMSNTIGFLYFG-----HGIQLSFMDTALLFPMGALIPRVILDVVSKCSER 475
 QY 447 AVSDQESQDGLYQKQOMLAVLHVLPPSVATMIFSSVCYWTGLHPEVARF----- 499
 Db 476 AMLYLELEDGLYTTGPYFFAKILGELPEHCAYVLIYGMPTYMLANLRFQLOPFLHPLV 535
 QY 500 -----GYFAALLAPHLIGELITLVLLGIQVQNPNI-VNSVVALLSIAGVLVSGFL 549
 Db 536 WLIVFCRIMALAALALPFTFMASFS-----NALYNSFYLAG---GFM 577
 QY 550 RNIQEMPIPKIISYFTPOKYCSEILVNEBYGINTFCGSSNVSVTTPN 597
 Db 578 INLSLMTVPRAWISKVSFLRMCFGLMKIQFSRRTYMPGNTLIYAS 625

RESULT 9

US-10-090-455-7
 ; Sequence 7, Application US/10090455
 ; Publication No. US20030027259A1
 ; GENERAL INFORMATION:
 ; APPLICANT: Chen, Hongyun
 ; APPLICANT: Le Bihan, Stephanie
 ; TITLE OF INVENTION: NOVEL ABCG4 TRANSPORTER AND USES THEREOF
 ; FILE REFERENCE: 100103.406
 ; CURRENT APPLICATION NUMBER: US/10/090,455
 ; PRIOR FILING DATE: 2002-03-01
 ; NUMBER OF SEQ ID NOS: 17
 ; SOFTWARE: FastSeq for Windows Version 4.0
 ; SEQ ID NO 7
 ; LENGTH: 673
 ; TYPE: PRT
 ; ORGANISM: Homo sapiens
 US-10-090-455-7

Query Match 21.0%; Score 697; DB 14; Length 673;
 Best Local Similarity 28.9%; Pred. No. 2.2e-57;
 Matches 187; Conservative 124; Mismatches 241; Indels 96; Gaps 16;
 QY 8 TPGGSMGLQVNRGSSSLEGA PAT-APPHSLGILHASYSVSHRVR-PWMD-ITSCROQW 64
 Db 16 TPQDTGLODRLPFSSESDNSLYFTYSGQPNLTLEVRDLYQVDLASQVPMFEQLAQFPMW 75
 QY 65 TRQI-----LKDVLVYESGOIMCIISSSGSGKTTLLDAMSGRLGAGTF-LGEVYV 115
 Db 76 TSPCQNSCEIGIONLSFKVRSGQMLAIISGSGGASLIDVITGR-GHGKIKSGQIWI 134
 QY 116 NGRALREPOFQDCFSYVLOSPTLLSLTVRETLHYTALLAI-RGNPGSFQKVEAVMAE 174
 Db 135 NGQPSSEQLVRKCVAAHRQNNOLLPNLTRETLAFIAQKMLPPTFQOARDKVEEVIAR 194
 QY 175 LLSHVADRLIGVYSLGISTGERRRYSIAQOLLDPKVMLEPPTGLDCMTANQIVVL 234

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Db      195 LRLROCADTRVGNMYVRSI:SGGERRRRSIVGVLNNPILILDEPTSGLSFTAHNIKVT 254
Qy      225 LVELARRRRIYVLTTHOPRSELPFQDPAEMIDFENDCGPCPEH 294
      225 LSRLLKGRRLVLIISHQPRSDIFRLFDVLMTSGTPIYLGAQHMVGYFTALIGYPCRY 314
Qy      225 SNPFDFYMDLTSVDTQSKEREIETSKRVQMIESAYKKAICHKTLKNIERMKH----- 348
      315 SNPAFYVDLNSIDRRSRSEOEIATREKAQSLAALF-----LEKVRDLDDFLMK 362
Qy      349 -----KTLPM-----VPEFKTRDSPGVSKVLRLRTRVLVANKLAVITRL 390
      363 AETKLDDETCVESSVTPLDNCPLSPTR-MGAVQQTTLIRKQISDFPDLFTLILHG 421
Qy      391 LQNLIMGELFLFVLVRVSNVLKGAIQ-----DRVGLVQVGAATPYTGMLNANVLFPVLR 446
      422 AAACIMNTIGFLYRG-----HGSIQSFMDTALLFMIGALIPFNVLIDVISKCYSER 475
Qy      447 AVSDSDSDGLYQKQOMLALYALHTLPSVATMTFSSVCYWTGLHREVARF----- 499
      476 AMLYELEDGLTTPGYFFPAKILGELPHECAVITITGMPTWLANLRGLOPFLHLLV 535
Qy      500 -----GYFSALLAPHLIGFLTLVLGIQVNPINVSVALISIVLWGSGL 549
      536 WLVPFCRIMLAAALPTFMASFFS-----NALYNSFYLAG-----GFM 577
Qy      550 RNIOEMPPIFKIISYTFQKYCEILVNEFYGLNFTGSSNSVTTN 597
      578 INLSLMTVPAMVSKVSEFLWCFEGLMKIQFSRRTRYKMLNLTIAVS 625

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RESULT 10

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US-09-961-086-1
; Sequence 1, Application US/09961086
; Publication No. US20030036645A1
; GENERAL INFORMATION:
; APPLICANT: UNIVERSITY OF MARYLAND, BALTIMORE
; APPLICANT: ROSS, Douglas D.
; APPLICANT: DOYLE, L. Austin
; APPLICANT: ABRUZZO, Lynne
; TITLE OF INVENTION: BREAST CANCER RESISTANCE PROTEIN (BCRP) AND THE DNA
; TITLE OF INVENTION: WHIC ENCODES IT
; FILE REFERENCE: EP19376-019
; CURRENT APPLICATION NUMBER: US/09/961,086
; CURRENT FILING DATE: 2001-09-21
; PRIOR APPLICATION NUMBER: US 60/073,763
; PRIOR FILING DATE: 1998-02-05
; PRIOR APPLICATION NUMBER: PCT/US99/02577
; PRIOR FILING DATE: 1999-02-05
; NUMBER OF SEQ ID NOS: 7
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 1
; LENGTH: 655
; TYPE: PRT
; ORGANISM: Homo sapiens
US-09-961-086-1

```

Query Match 20.5%; Score 682.5; DB 10; Length 655;
 Best Local Similarity 29.2%; Pred. No. 5,2e-56;
 Matches 182; Conservative 138; Mismatches 249; Indels 55; Gaps 18;

```

Qy      21 SSSLEGAPATP---EPHSLGILHASYSVSHRVPWMDITSCROQWROILKDVSLVE 77
      13 SGNNTNGFPATASNDIKATGEGAVLSFNHCYRVKXSGFLPCRPVEKEILISNINGIMK 72
Db      78 SGOIMCIIGSSGSGKTTLLDAMSGRLGAGTFLGEVYVNGALRREQFQDCFSYVLQSDT 137
      73 PG-LNALIGPTGGKSSLDVLAARDPSG-LSGDVLING-APRANPKNSGYVQDDV 129
Qy      138 LLSLTVRETLHYTLALIRGNPG-SFOKYEAVMAELSLSHVADRILIGNYSIGSISTG 196
      130 VNGTLVRENLOPSAALRLATTMTNHEKNERINRVIOELGDLKADSKVQIOFINGVSGG 189

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Qy      197 ERRRVSIAQILLQDPKVMLEDEPTGLDCMTANQVILVIELARRNRIVLTIHOPRSEL 256
Db      190 ERRRTSIGMELLTDPILFLDEPTGLDSTANAVALLIKRMSKGRITTFISHOPRYSI 249
Qy      257 FQDPAEMIDFENDCGPCPEHNSPDPFYMDLTSVDTQ-----SK 312
      250 FKLFDLTLASGRMLFHGPQOALGYFESAGYHCBAYNPPDFLDIINGSTAVALNR 309
Qy      313 ERE-----IETSKR-----VQMIESAYKKAICHKTLKNIERMKHKTLPMPVF 356
      310 EEDFKATEIIEPSKQKPIEKLAETIYVNSPFYKETKALHQLSGEKKKLTVEKISY 369
Db      357 KTDSGVSCKVLRLRTRVLVANKLAVITRLQNLIMGELF--LFPVLVRVSNVLKGA 414
Qy      370 TT-----SPCHQLRWKSRSFKNLGNPQASIQAIYTVLGLVIGATIFGLKNDST---- 421
      415 AIDRVGLLYQFVGAATPYGMLNANVLFPVLRAVSDSDGLYQKQOMLALYAL-HVLP 473
Db      422 GIONRAGVLF-FLTNQCFSSVSAAVELFVVEKKLFHEHYSIGYVRSYFLKLSLDLP 480
Qy      474 FSVATMTFSSVCYWTGLHREVARGYFSALLAPHLIGELTLVLGIQVNPINVS 533
      481 MTMLPSIIFTCTIYFEMLGKPRADAFVMMFTLM--WVAYSASSMALAIAQGSVSTA 537
Qy      534 VALLSIAGV--LVGSGFLNIOEMPPIFKIISYTFQKYCEILVNEFYGLNFTGSSN 591
      538 TLMTICFVFMMIFSGLLVNLTTIASWLSWLGYSIPRYGFTALQNHETLQGNFCRG--- 594
Qy      592 VSVTINPMQAFQGIQFIKTCPG 615
      595 LNAIGNNPNCAVY-----TCTG 610

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RESULT 11

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US-10-405-806-13
; Sequence 13, Application US/10405806
; Publication No. US2003022362A1
; GENERAL INFORMATION:
; APPLICANT: KOMATANI, HIDEYA
; APPLICANT: HARA, YOSHIKAZU
; APPLICANT: KOTANI, HIDEHIKO
; APPLICANT: NAKAGAMA, RINAKO
; TITLE OF INVENTION: DRUG RESISTANT GENE AND USE THEREOF
; FILE REFERENCE: 234985050CONT
; CURRENT APPLICATION NUMBER: US/10/405,806
; CURRENT FILING DATE: 2003-04-03
; PRIOR APPLICATION NUMBER: PCT/JP01/08112
; PRIOR FILING DATE: 2001-09-18
; PRIOR APPLICATION NUMBER: JP2000-303441
; PRIOR FILING DATE: 2000-10-03
; NUMBER OF SEQ ID NOS: 17
; SOFTWARE: PatentIn version 3.2
; SEQ ID NO 13
; LENGTH: 655
; TYPE: PRT
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: ABCG2 482Tmutant sequence
US-10-405-806-13

```

Query Match 20.5%; Score 682.5; DB 15; Length 655;
 Best Local Similarity 29.2%; Pred. No. 5,2e-56;
 Matches 182; Conservative 138; Mismatches 249; Indels 55; Gaps 18;

```

Qy      21 SSSLEGAPATP---EPHSLGILHASYSVSHRVPWMDITSCROQWROILKDVSLVE 77
      13 SGNNTNGFPATASNDIKATGEGAVLSFNHCYRVKXSGFLPCRPVEKEILISNINGIMK 72
Db      78 SGOIMCIIGSSGSGKTTLLDAMSGRLGAGTFLGEVYVNGALRREQFQDCFSYVLQSDT 137
      73 PG-LNALIGPTGGKSSLDVLAARDPSG-LSGDVLING-APRANPKNSGYVQDDV 129
Qy      138 LLSLTVRETLHYTLALIRGNPG-SFOKYEAVMAELSLSHVADRILIGNYSIGSISTG 196

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Db      130 VAGTIVRENLQFSAALRLATTMTNHEKNERINRINRQIOLGDKVADSKVQGFIRGVSQG 189
      197 ERRRVSIAQLLODPKVMLEDEPTGLDCMTANOIVLLVELARNRIVLTIHQPSRL 256
      190 ERKRISIGMELLIDPSILFDEPTGLDSTANAVALLKRMKSQGRITIFSIHQPRYSI 249
      257 FOLFKAILSPGELLFCGTPAEMLDPFNDGCGPCDEHSNPPDFYMDLTSVDTO---SK 312
      250 FKLFDLSLTLASGRMLFHGPAQALGYFBSAGYHCAVNNPADFLDITNGDSTAVANR 309
      313 ERE-----IETSKR---VQMIESAYKSAICHTK-----LKNIERMKHLKTLPMVPF 356
      310 EEDFKATEIIEPSKQDKPLIEKLAETIYVNSSFYKETKAEHLQSGGEKKKIIVFEISY 369
      357 KTKDSPGVSKLGVLLRRTNRLVRNKLAVITRLQNLIMJLFL--LFFVLRRSNVLKG 414
      370 TT-----SFCHQLRWVSRSFKNLLGNPQASIAQIITVVLGIVGAIYFGLKNDST--- 421
      415 AIODRVGLLYQFYGATPYTGMLNANVLPVLRASVDSQSGLYQKQOMLAVYL-HVLP 473
      422 GIQNRAGVLF-FLTNQCCSSVSAVELFVYEKKLFTHETISGYRVSSYFLGKLSDDL 480
      474 FSVVATMIFSSVCYWTGLHPEVARFGYPSAALLAHLIGEFLTVLLGIQVQNPNTVNSV 533
      481 MMLPSSIIFTCIYFVLMGLPKADAFVMMFTLM--WVAYSASMALIAAGQSVSVA 537
      534 VALLSIAGV--LVSGFLRNIOEMPIPFKLIISYFTFOKCSILVNEFYGLNFTCGSSN 591
      538 TLMTICFVFMMLFSGLVNLTITIASWLSWLOFSPRIGFTALQHNFLGQNFPCG--- 594
      592 VSVTTNPMCAFTQGIQFIETKCPG 615
      595 LNAIGNPNPNYA-----TCTG 610

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RESULT 12
US-09-981-353
; Sequence 353, Application US/09981353
; Patent No. US20020160382A1
; GENERAL INFORMATION:
; APPLICANT: Iasek, Amy W.
; TITLE OF INVENTION: GENES EXPRESSED IN COLON CANCER
; FILE REFERENCE: PA-0038 US
; CURRENT APPLICATION NUMBER: US/09/981,353
; CURRENT FILING DATE: 2001-10-11
; NUMBER OF SEQ ID NOS: 194
; SOFTWARE: PERL Program
; SEQ ID NO 35
; LENGTH: 655
; TYPE: PRT
; ORGANISM: Homo sapiens
; FEATURE:
; NAME/KEY: misc feature
; OTHER INFORMATION: incyte ID No. US20020160382A1 5517972CD1
US-09-981-353-35

```

```

Query Match      20.5%; Score 680.5; DB 9; Length 655;
Best Local Similarity 29.2%; Pred. No. 8.1e-56;
Matches 182; Conservative 137; Mismatches 250; Indels 55; Gaps 18;

```

```

      21 SOSLSGAPATAP---EPHSIGILHASVSHRVRPWWMDITSCROQWTRQILKDVSLYE 77
      13 SQGNTNGFPATASNDLKAFTEGAVLSFHNICRYVKLSGFLPKCKYVEKEILSNINGIMK 72
      78 SQGIMCILGSSGSKTLLDAMSGRLGRAGTFLGEVYVNGRALRREQDFCSYVLQSDT 137
      73 PG-INAILGPTGGKSLDLVLAARKDPG-LSGDVLING-APRAPNFCNGSGYVQDDV 129
      138 LLSLTVRETLHTALLAIRGNPG--SFQKVAVNAELSLSHVADRLLGNVSLGISTG 196
      130 VMGTLTVRENLQFSAALRLATTMTNHEKNERINRINRQIOLGDKVADSKVQGFIRGVSQG 189

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      197 ERRRVSIAQLLODPKVMLEDEPTGLDCMTANOIVLLVELARNRIVLTIHQPSRL 256
      190 ERKRISIGMELLIDPSILFDEPTGLDSTANAVALLKRMKSQGRITIFSIHQPRYSI 249
      257 FOLFKAILSPGELLFCGTPAEMLDPFNDGCGPCDEHSNPPDFYMDLTSVDTO---SK 312
      250 FKLFDLSLTLASGRMLFHGPAQALGYFBSAGYHCAVNNPADFLDITNGDSTAVANR 309
      313 ERE-----IETSKR---VQMIESAYKSAICHTK-----LKNIERMKHLKTLPMVPF 356
      310 EEDFKATEIIEPSKQDKPLIEKLAETIYVNSSFYKETKAEHLQSGGEKKKIIVFEISY 369
      357 KTKDSPGVSKLGVLLRRTNRLVRNKLAVITRLQNLIMJLFL--LFFVLRRSNVLKG 414
      370 TT-----SFCHQLRWVSRSFKNLLGNPQASIAQIITVVLGIVGAIYFGLKNDST--- 421
      415 AIODRVGLLYQFYGATPYTGMLNANVLPVLRASVDSQSGLYQKQOMLAVYL-HVLP 473
      422 GIQNRAGVLF-FLTNQCCSSVSAVELFVYEKKLFTHETISGYRVSSYFLGKLSDDL 480
      474 FSVVATMIFSSVCYWTGLHPEVARFGYPSAALLAHLIGEFLTVLLGIQVQNPNTVNSV 533
      481 MMLPSSIIFTCIYFVLMGLPKADAFVMMFTLM--WVAYSASMALIAAGQSVSVA 537
      534 VALLSIAGV--LVSGFLRNIOEMPIPFKLIISYFTFOKCSILVNEFYGLNFTCGSSN 591
      538 TLMTICFVFMMLFSGLVNLTITIASWLSWLOFSPRIGFTALQHNFLGQNFPCG--- 594
      592 VSVTTNPMCAFTQGIQFIETKCPG 615
      595 LNAIGNPNPNYA-----TCTG 610

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RESULT 13
US-10-120-687-61
; Sequence 61, Application US/10120687
; Publication No. US20030082155A1
; GENERAL INFORMATION:
; APPLICANT: Massachusetts General Hospital
; TITLE OF INVENTION: Stem Cells of the Islets of Langerhans and Their Use in Treating
; TITLE OF INVENTION: Mellitus
; FILE REFERENCE: 3284/1235B
; CURRENT APPLICATION NUMBER: US/10/120,687
; PRIOR FILING DATE: 2002-04-11
; PRIOR APPLICATION NUMBER: US60/169082
; PRIOR FILING DATE: 1999-12-06
; PRIOR APPLICATION NUMBER: US 09/963,875
; PRIOR FILING DATE: 2001-09-25
; PRIOR APPLICATION NUMBER: US 60/215109
; PRIOR FILING DATE: 2000-06-28
; PRIOR APPLICATION NUMBER: US 60/238880
; PRIOR FILING DATE: 2000-10-06
; PRIOR APPLICATION NUMBER: US 09/731261
; PRIOR FILING DATE: 2000-12-06
; NUMBER OF SEQ ID NOS: 61
; SOFTWARE: PatentIn version 3.1
; SEQ ID NO 61
; LENGTH: 655
; TYPE: PRT
; ORGANISM: Homo sapiens
US-10-120-687-61

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Query Match      20.5%; Score 680.5; DB 14; Length 655;
Best Local Similarity 29.2%; Pred. No. 8.1e-56;
Matches 182; Conservative 137; Mismatches 250; Indels 55; Gaps 18;

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      21 SOSLSGAPATAP---EPHSIGILHASVSHRVRPWWMDITSCROQWTRQILKDVSLYE 77
      13 SQGNTNGFPATASNDLKAFTEGAVLSFHNICRYVKLSGFLPKCKYVEKEILSNINGIMK 72
      78 SQGIMCILGSSGSKTLLDAMSGRLGRAGTFLGEVYVNGRALRREQDFCSYVLQSDT 137

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Db      73 PG-LNALIGPTGGKSSLLDVLARKDPG-LSGDVLING-APRPANFKNSGVVDDV 129
Qy      138 LLSLTVRETHYATLAIIRGNPG-SFOKKVEAVMAELISHVADRLIGNSIGISTG 196
      130 VMGTLTVRENTQFSAALRLATITNHEKNERINRINVEIGELGIDKXADSKVGTQIRGVSQ 189
Qy      197 ERRRVSIAAOQLQDPKVMLEDEPTTGLDCMTANOIVLVELARNRIVLTIHQPSSE 256
Db      190 ERKRTSIGMELITDPSILFDEPTTGLDSSSTANAVLLILKMSKQGRITIFS.IHQPRYSI 249
Qy      257 FQLEPKIALISGELIFCGTFAEMLD.FENDGYPCEPHSNPDEPYMDLTSVDQ----SK 312
Db      250 FQLEPDLTLASGRIMFHPGPAQELGFESAGYHCEAYNNPADPFLDINDSTANAVLN 309
Qy      313 ERE-----IETSKR-----VOMISAYKSAICHKT-----LNTERMKLTKLPWVP 356
Db      310 EEDFKATEIIEPSQDKPLIEKLAIEIVNSSFYKETAELHQLSGEKKKKTIVFEKISY 369
Qy      357 KTKDSPGVPSKLGVLRLRVNTLVNKLAVITRLLQNLINGLFL--LFFVLARSNVLKG 414
Db      370 TT-----SFCHQLRWVSKSPKLLGNPQASIAQIIVVLGLVIGALYFGKNDST---- 421
Qy      415 AIQDRVGLIYQFVGATPYTGM.LNAVNLFPVLRAVSDQSDGLYQKQOMLAVAL-HVLP 473
Db      422 GIQNRAGVLF-FLTNNQCFSSVSNAVELFVVEKULFIHEYISGYRVSSYFLGKLLDLP 480
Qy      474 PSVATMTFSSVCYWTGLHPEVARFGYFSAALLAPHLIGELTIVLGIQONRNIVNSV 533
Db      481 MRMLPSIIFTCIVYFMGLGKPKADAFVMMFTLM---VVAVSASSMALAIAAGOSVVA 537
Qy      534 VALLSIAGV--LVSGGFRLNIQEMPIPKIISYFTFOKYCEIIVNEFEYGLNFTCGSSN 591
Db      538 TLMNTCFVHMVITPSGLLVNLTITIASWLSWQYFSIRYGTALQHNFEFLQGNFCPG--- 594
Qy      592 VSVTTNPMCAFTQGIQIETKTCPG 615
Db      595 LNATGNNPCNYA-----TCTG 610

RESULT 14
US-10-405-806-2
; Sequence 2, Application US/10405806
; Publication No. US2003023262A1
; GENERAL INFORMATION:
; APPLICANT: KOMATANI, HIDEYA
; APPLICANT: HARA, YOSHIKAZU
; APPLICANT: KOTANI, HIDEHITO
; APPLICANT: NAKAGAWA, RINAKO
; TITLE OF INVENTION: DRUG RESISTANT GENE AND USE THEREOF
; FILE REFERENCE: 234985USOCNT
; CURRENT APPLICATION NUMBER: US/10/405,806
; PRIOR FILING DATE: 2003-04-03
; PRIOR APPLICATION NUMBER: PCT/JP01/08112
; PRIOR FILING DATE: 2001-09-18
; PRIOR APPLICATION NUMBER: JP2000-303441
; NUMBER OF SEQ ID NOS: 17
; SOFTWARE: PatentIn version 3.2
; SEQ ID NO 2
; LENGTH: 655
; TYPE: PRT
; ORGANISM: Homo sapiens
US-10-405-806-2

Query Match      20.5%; Score 680.5; DB 15; Length 655;
Best Local Similarity 29.2%; Pred. No. 8,1e-56;
Matches 182; Conservative 137; Mismatches 250; Indels 55; Gaps 18;

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Db      73 PG-LNALIGPTGGKSSLLDVLARKDPG-LSGDVLING-APRPANFKNSGVVDDV 129
Qy      138 LLSLTVRETHYATLAIIRGNPG-SFOKKVEAVMAELISHVADRLIGNSIGISTG 196
      130 VMGTLTVRENTQFSAALRLATITNHEKNERINRINVEIGELGIDKXADSKVGTQIRGVSQ 189
Qy      197 ERRRVSIAAOQLQDPKVMLEDEPTTGLDCMTANOIVLVELARNRIVLTIHQPSSE 256
Db      190 ERKRTSIGMELITDPSILFDEPTTGLDSSSTANAVLLILKMSKQGRITIFS.IHQPRYSI 249
Qy      257 FQLEPKIALISGELIFCGTFAEMLD.FENDGYPCEPHSNPDEPYMDLTSVDQ----SK 312
Db      250 FQLEPDLTLASGRIMFHPGPAQELGFESAGYHCEAYNNPADPFLDINDSTANAVLN 309
Qy      313 ERE-----IETSKR-----VOMISAYKSAICHKT-----LNTERMKLTKLPWVP 356
Db      310 EEDFKATEIIEPSQDKPLIEKLAIEIVNSSFYKETAELHQLSGEKKKKTIVFEKISY 369
Qy      357 KTKDSPGVPSKLGVLRLRVNTLVNKLAVITRLLQNLINGLFL--LFFVLARSNVLKG 414
Db      370 TT-----SFCHQLRWVSKSPKLLGNPQASIAQIIVVLGLVIGALYFGKNDST---- 421
Qy      415 AIQDRVGLIYQFVGATPYTGM.LNAVNLFPVLRAVSDQSDGLYQKQOMLAVAL-HVLP 473
Db      422 GIQNRAGVLF-FLTNNQCFSSVSNAVELFVVEKULFIHEYISGYRVSSYFLGKLLDLP 480
Qy      474 PSVATMTFSSVCYWTGLHPEVARFGYFSAALLAPHLIGELTIVLGIQONRNIVNSV 533
Db      481 MRMLPSIIFTCIVYFMGLGKPKADAFVMMFTLM---VVAVSASSMALAIAAGOSVVA 537
Qy      534 VALLSIAGV--LVSGGFRLNIQEMPIPKIISYFTFOKYCEIIVNEFEYGLNFTCGSSN 591
Db      538 TLMNTCFVHMVITPSGLLVNLTITIASWLSWQYFSIRYGTALQHNFEFLQGNFCPG--- 594
Qy      592 VSVTTNPMCAFTQGIQIETKTCPG 615
Db      595 LNATGNNPCNYA-----TCTG 610

RESULT 15
US-09-866-866A-10
; Sequence 10, Application US/09866866A
; Patent No. US20020102244A1
; GENERAL INFORMATION:
; APPLICANT: Sorrentino, Brian
; APPLICANT: Schuetz, John
; TITLE OF INVENTION: A Method of Identifying and/or Isolating Stem Cells
; FILE REFERENCE: 1340-1-02CIP2
; CURRENT APPLICATION NUMBER: US/09/866,866A
; CURRENT FILING DATE: 2001-08-30
; PRIOR APPLICATION NUMBER: 09/584,586
; PRIOR FILING DATE: 2000-05-31
; PRIOR APPLICATION NUMBER: PCT/US99/11825
; PRIOR FILING DATE: 1999-05-27
; PRIOR APPLICATION NUMBER: 60/086,988
; PRIOR FILING DATE: 1998-05-28
; NUMBER OF SEQ ID NOS: 27
; SOFTWARE: PatentIn version 3.0
; SEQ ID NO 10
; LENGTH: 655
; TYPE: PRT
; ORGANISM: Homo sapien
US-09-866-866A-10

Query Match      20.3%; Score 674.5; DB 9; Length 655;
Best Local Similarity 29.0%; Pred. No. 3,1e-55;
Matches 181; Conservative 137; Mismatches 251; Indels 55; Gaps 18;

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Qy      21 SSSSLGAPATP---EHSIGILHASVSHRVPMWDITSRCQOQTRQIKDVSUYE 77
      13 SGGNTNGPFAIVSNDIKATFEGAVLSFHNICRVKLKSGFLPCKRKEVEKILSNINGIMK 72
Db      78 SQQIMCIIIGSSGSGKTTLLDAMSGRLGRAGTFLGEVYVNGALRRECPQDCFSYVLQSDT 137

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